AN 1988-116784 [17] WPIDS

DNN N1988-088674 DNC C1988-052680

TI Fine copper wire mfr. contg. titanium - by drawing and annealing ingot after casting in vacuum or non-oxidising atmos..

DC L03 M26 U11 X12

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PI JP 63064211 A 19880322 (198817)\* 6p JP 04064121 B 19921014 (199245) 8p

ADT JP 63064211 A JP 1986-208896 19860905; JP 04064121 B JP 1986-208896 19860905

FDT JP 04064121 B Based on JP 63064211

PRAI JP 1986-208896 19860905

AB JP 63064211 A UPAB: 19930923

Fine Cu wire comprises  $0.1-9~{\rm ppm}$  Ti,  $0.2-9.5~{\rm ppm}$  as a total amt. of one or

more of respectively 0.1-9 ppm Nb, Mg, Ca, rare earth elements, Hf, V, Ta,

Pd, Pt, Au, Cd, B, Al, In, Si, Ge, Pb, P, Sb, and Bi, and balance Cu. Th purity of balance Cu is 99.999 wt.% or over. The fine Cu wire is made by repeating wire drawing and annealing the Cu ingot which was cast in vacuum or non-oxidising atmos., to specified wire dia., in which final working ratio is made to 70-99.99%.

and annealing is done to be 2-20% elongation. After the annealing, 1-5% redn. of area is applied to obtain 2-20% elongation.

USE/ADVANTAGE - The fine Cu wire made by the method is used for bonding wire used in making semiconductor. 0/2